

Fig. I.1A

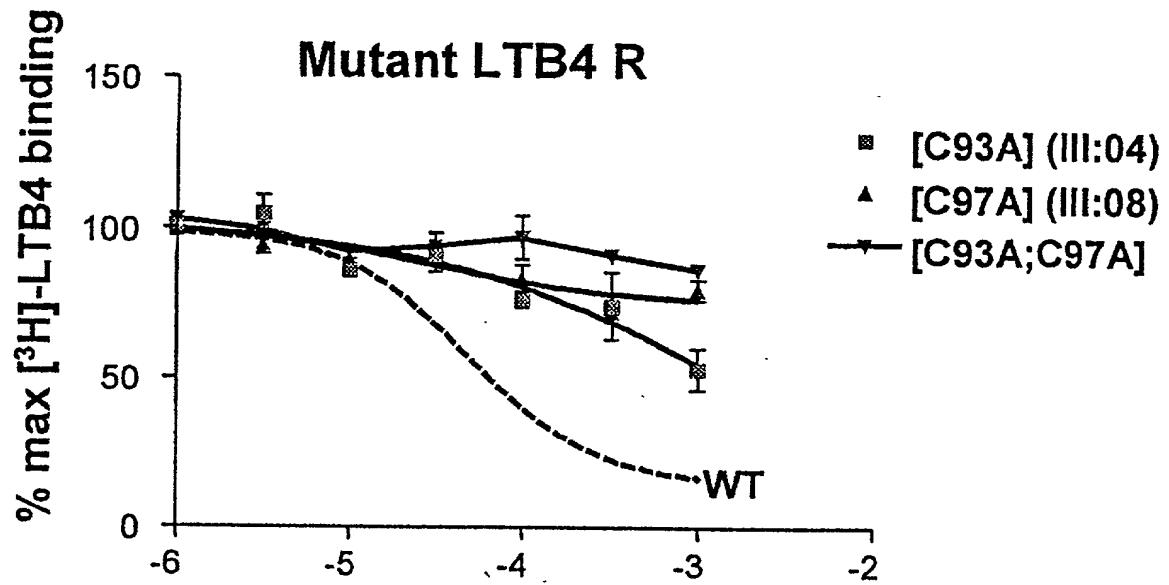


Fig. I.1B

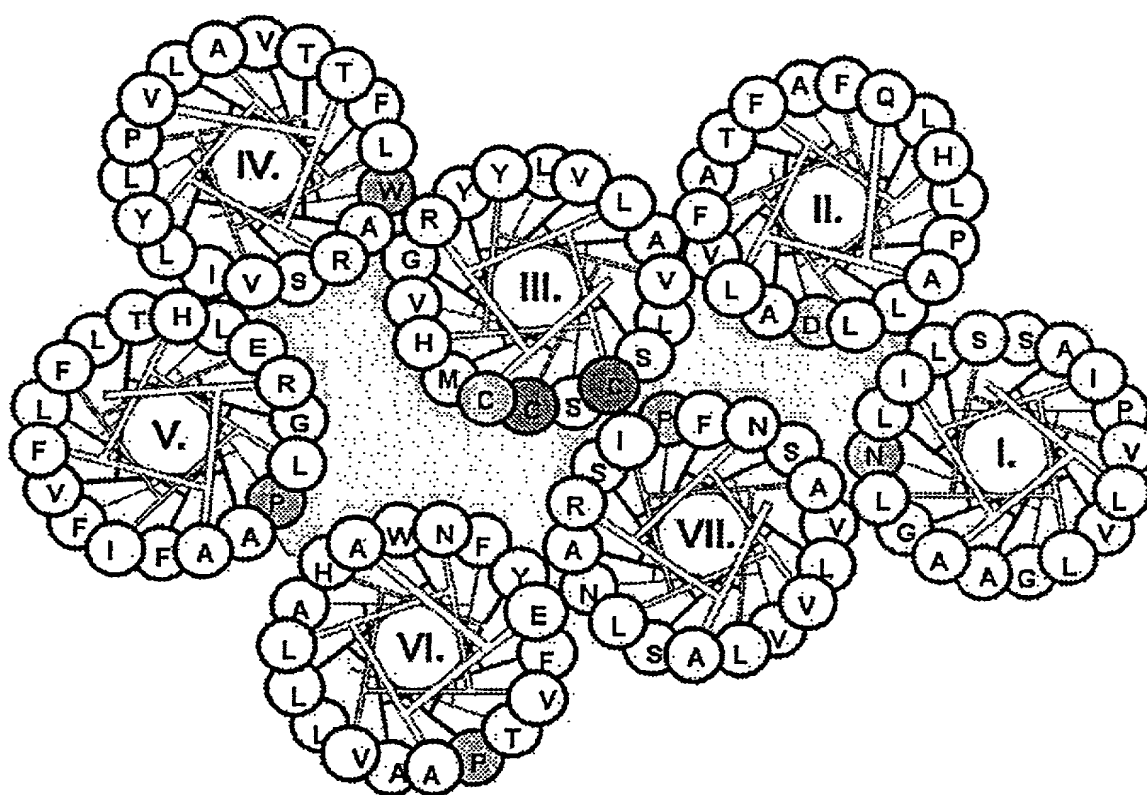


Fig. I.1C

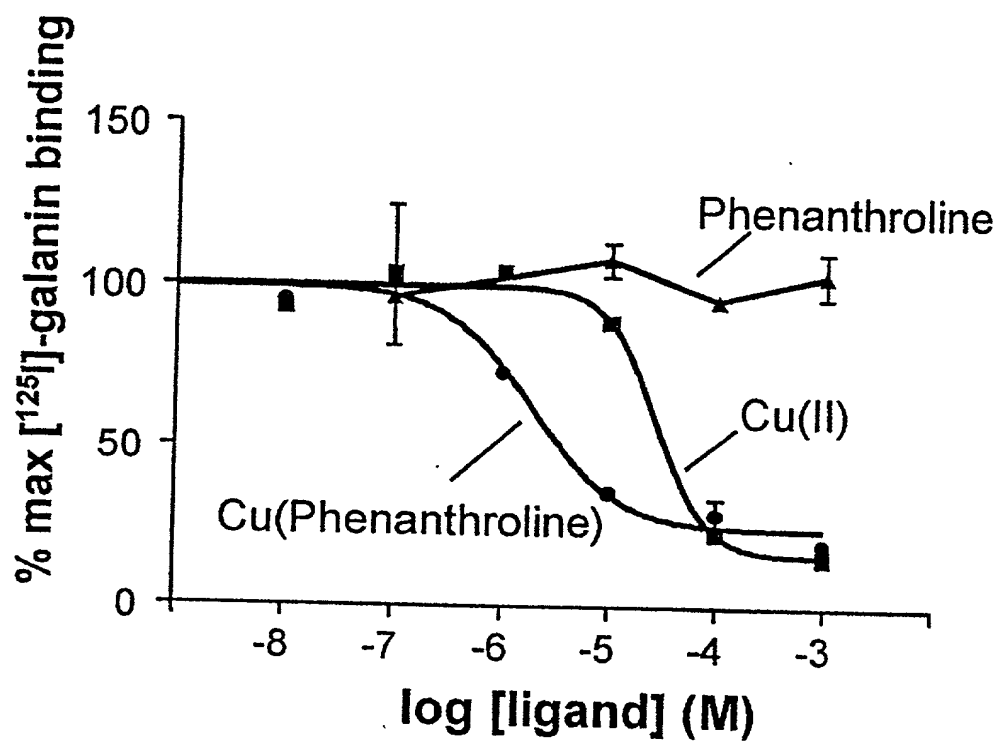


Fig. I.2A

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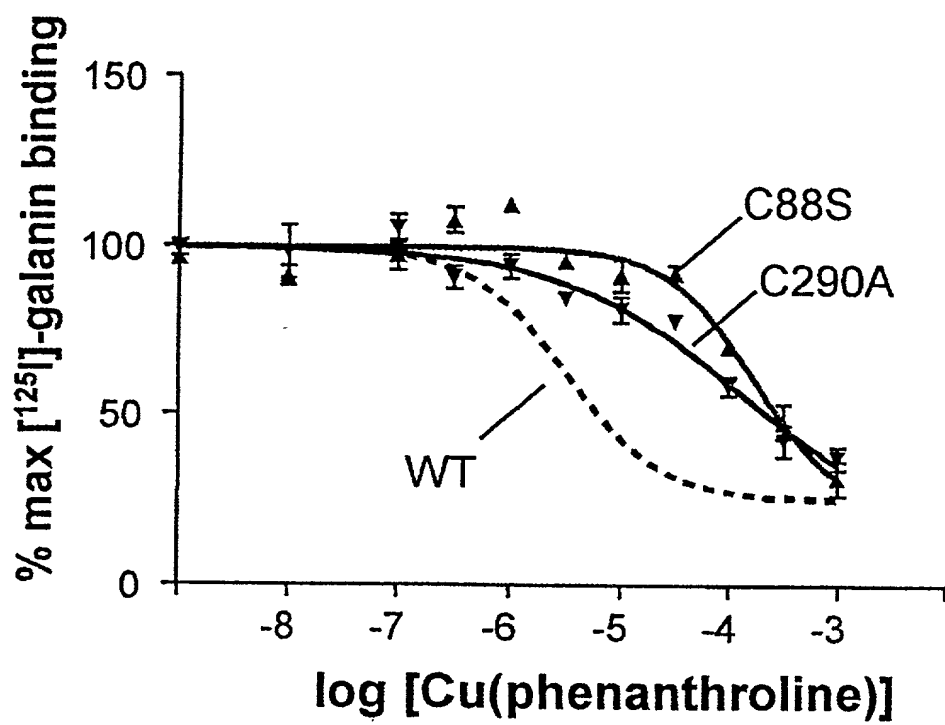


Fig. I.2B

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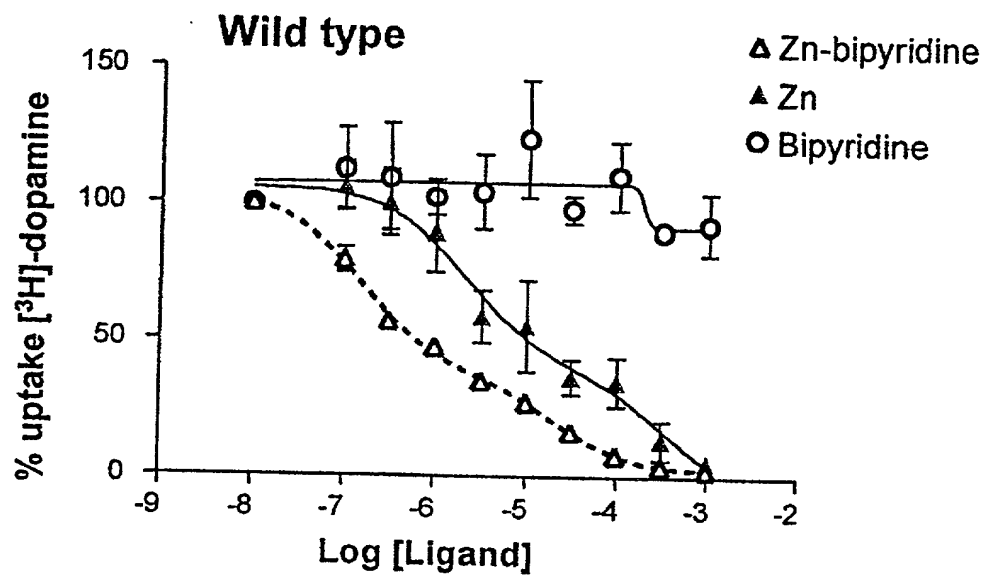


Fig. I.3A

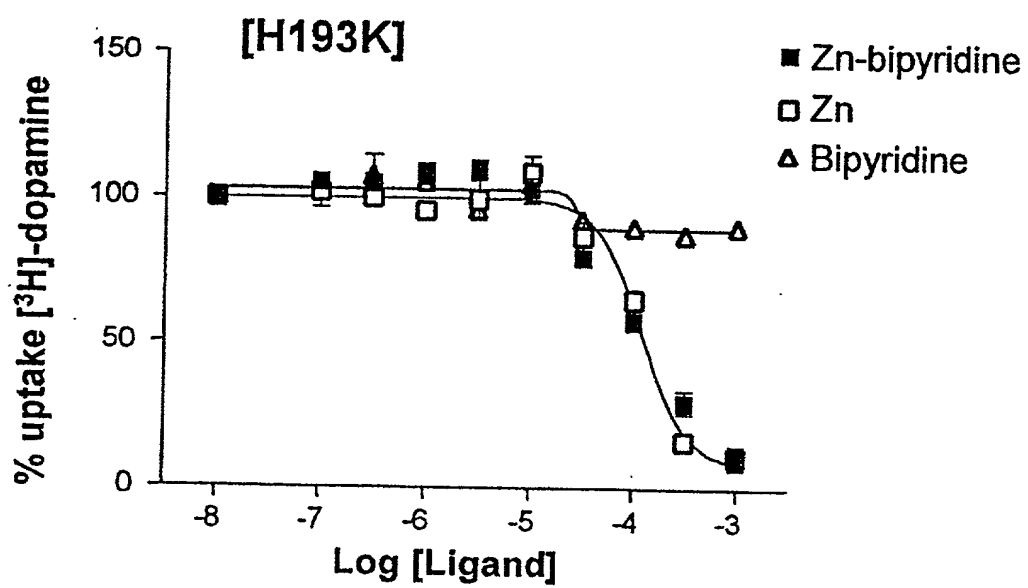


Fig. I.3B

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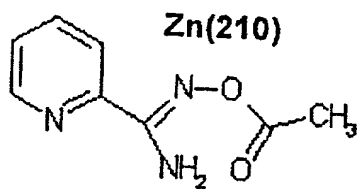
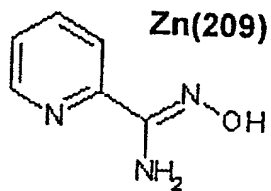
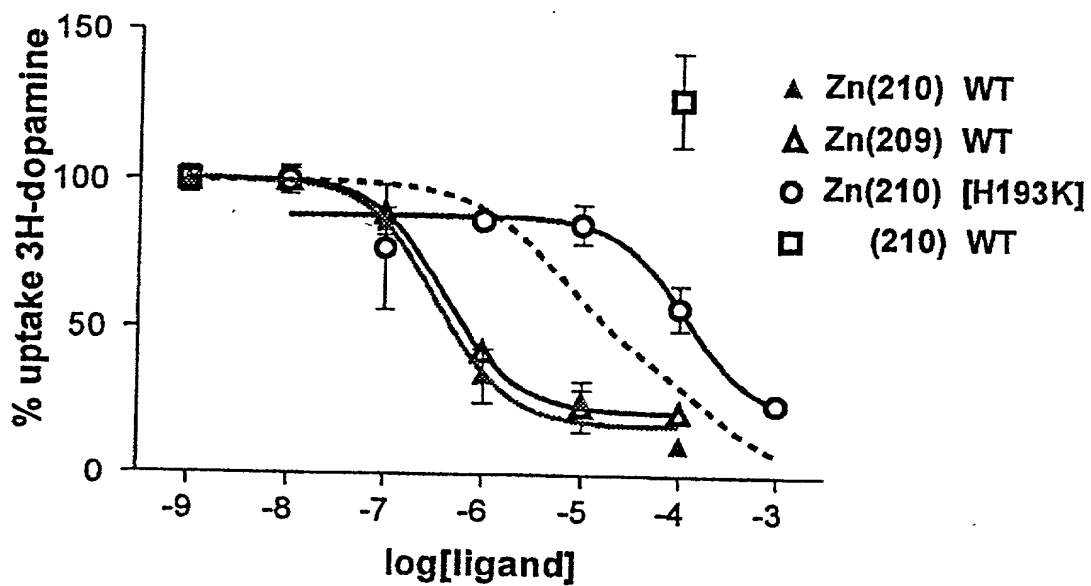


Fig. I.3C

		Ions		1,10-Phenanthroline-complexes		2,2'-Bipyridine-complexes	
		Zn ± SEM (n)	Cu ± SEM (n)	Zn ± SEM (n)	Cu ± SEM (n)	Zn ± SEM (n)	Cu ± SEM (n)
WT hNK 1		320 ± 20 (5)	370 ± 30 (5)	490 ± 50 (4)	480 ± 60 (3)	390 ± 60 (4)	150 ± 30 (2)
Y92H	II:24;III:04	17 ± 3 (3)	28 ± 5 (2)	26 ± 5 (2)	28 ± 6 (3)	31 ± 5 (3)	25 ± 3 (2)
E193H;N109H	III:05;V:01	13 ± 5 (2)	120 ± 20 (2)	46 ± 9 (2)	120 ± 20 (2)	13 ± 4 (2)	160 ± 30 (2)
P112H;M291C	III:08;VII:06	41 ± 9 (6)	82 ± 15 (2)	63 ± 4 (5)	45 ± 12 (4)	21 ± 2 (4)	13 ± 2 (4)
Y272H	V:05;VI:24	9.1 ± 1 (3)	330 ± 50 (3)	6.8 ± 1.2 (3)	150 ± 20 (2)	9.8 ± 3.2 (2)	140 ± 20 (2)

Fig. II.1A

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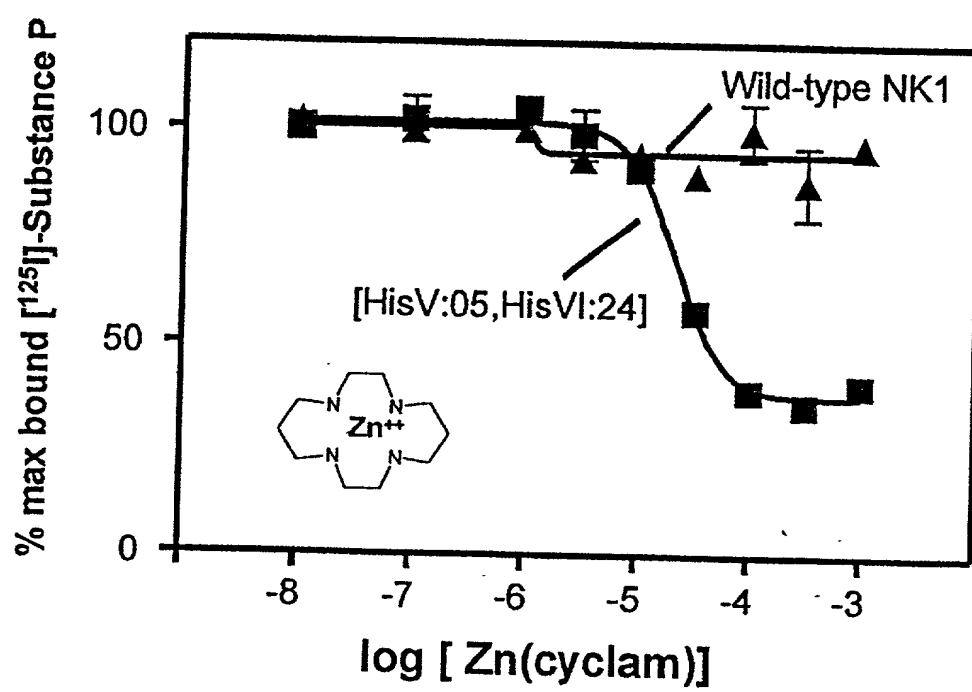


Fig. II.1B

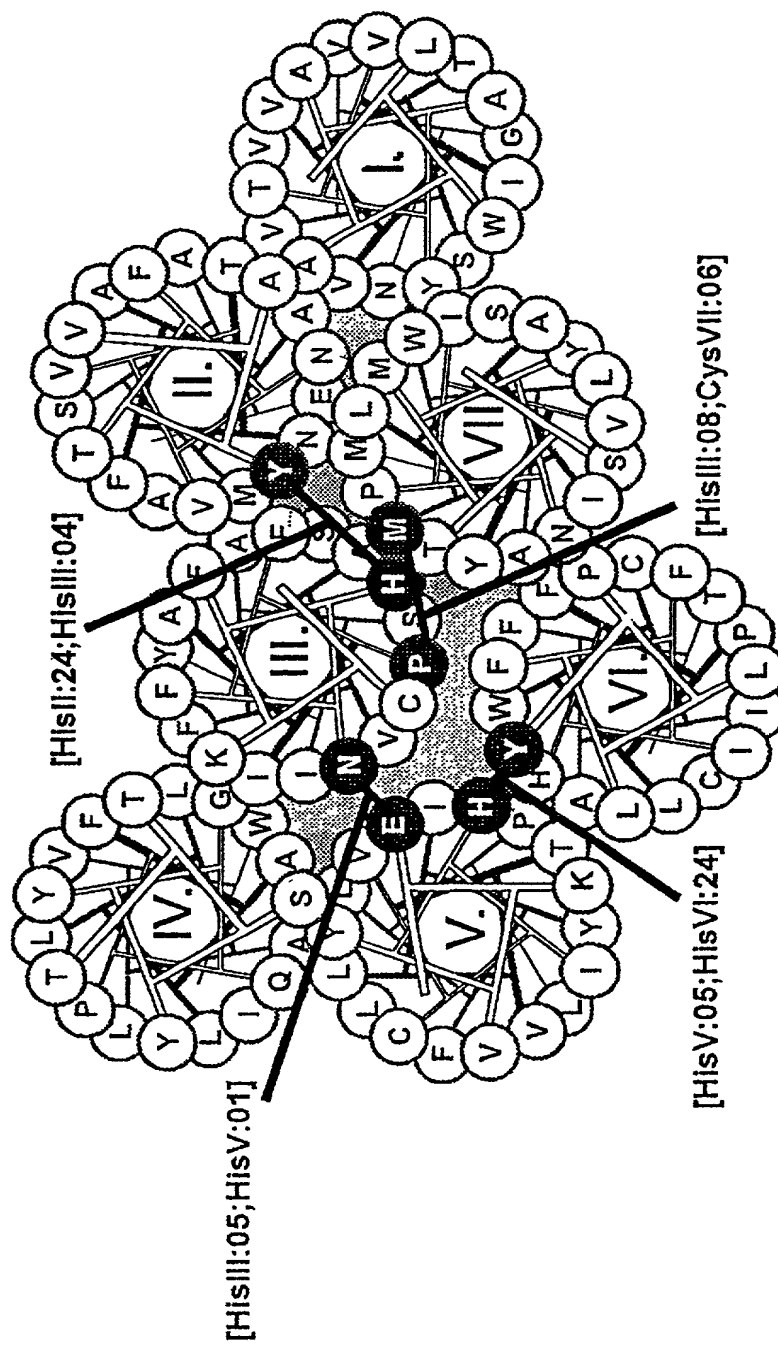


Fig. II.1C

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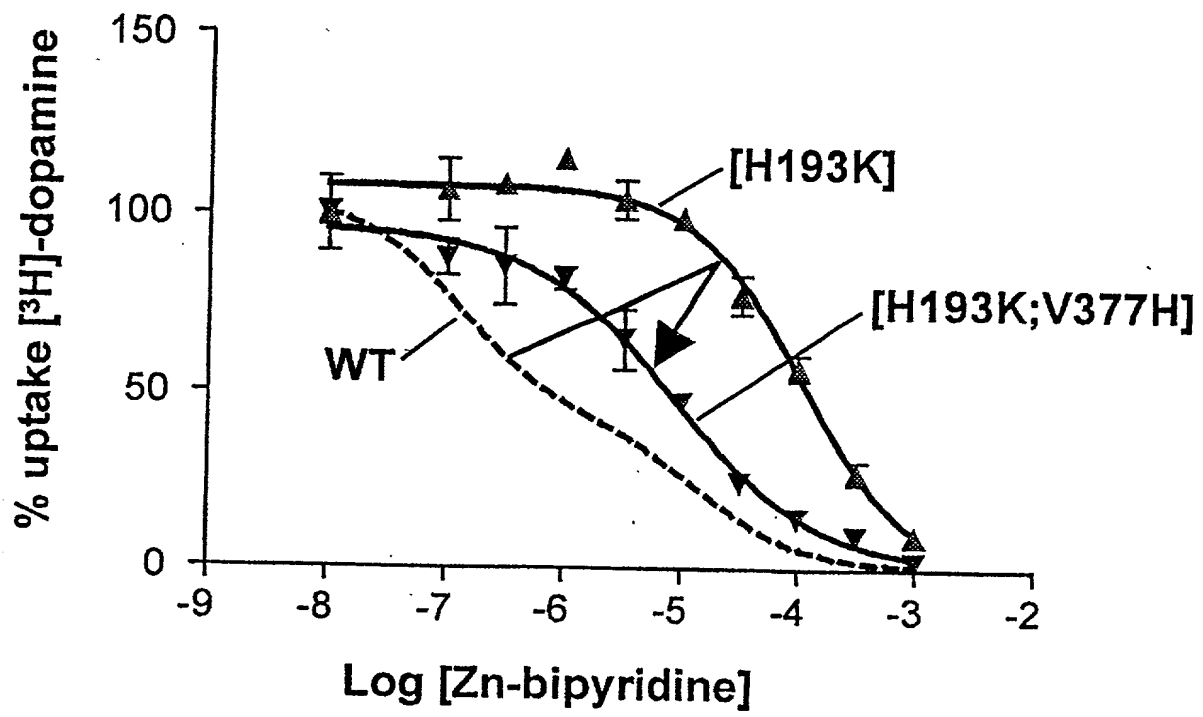


Fig. II.2A

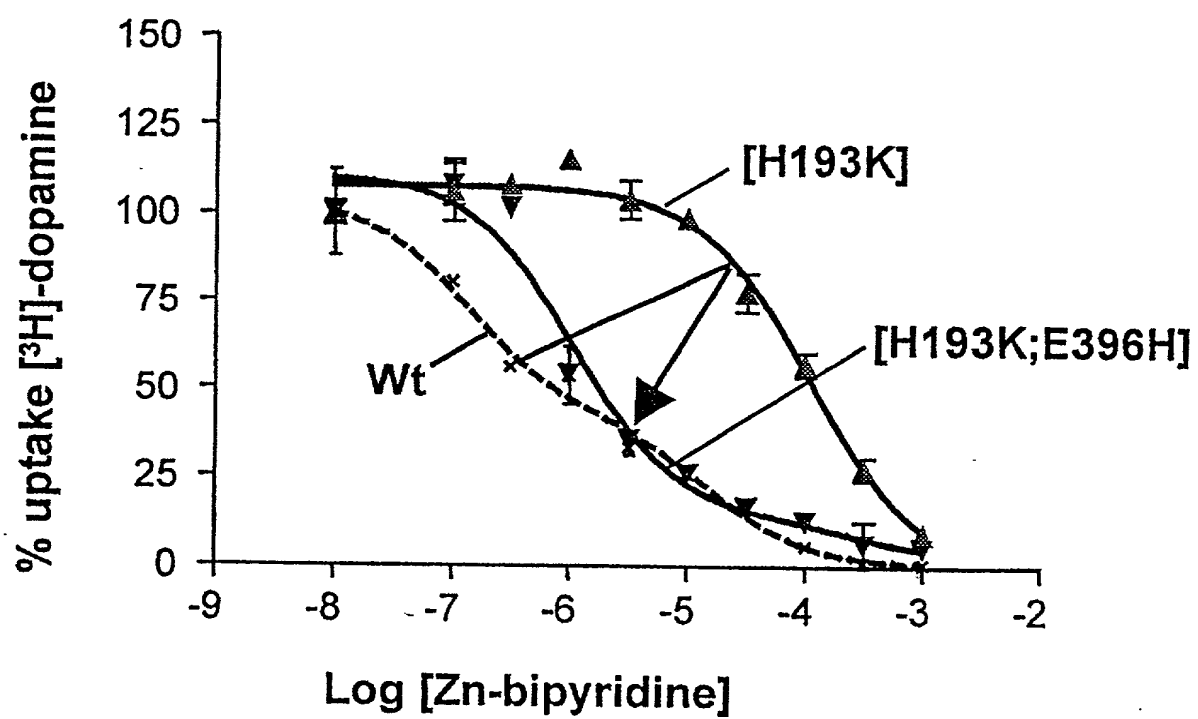


Fig. II.2B

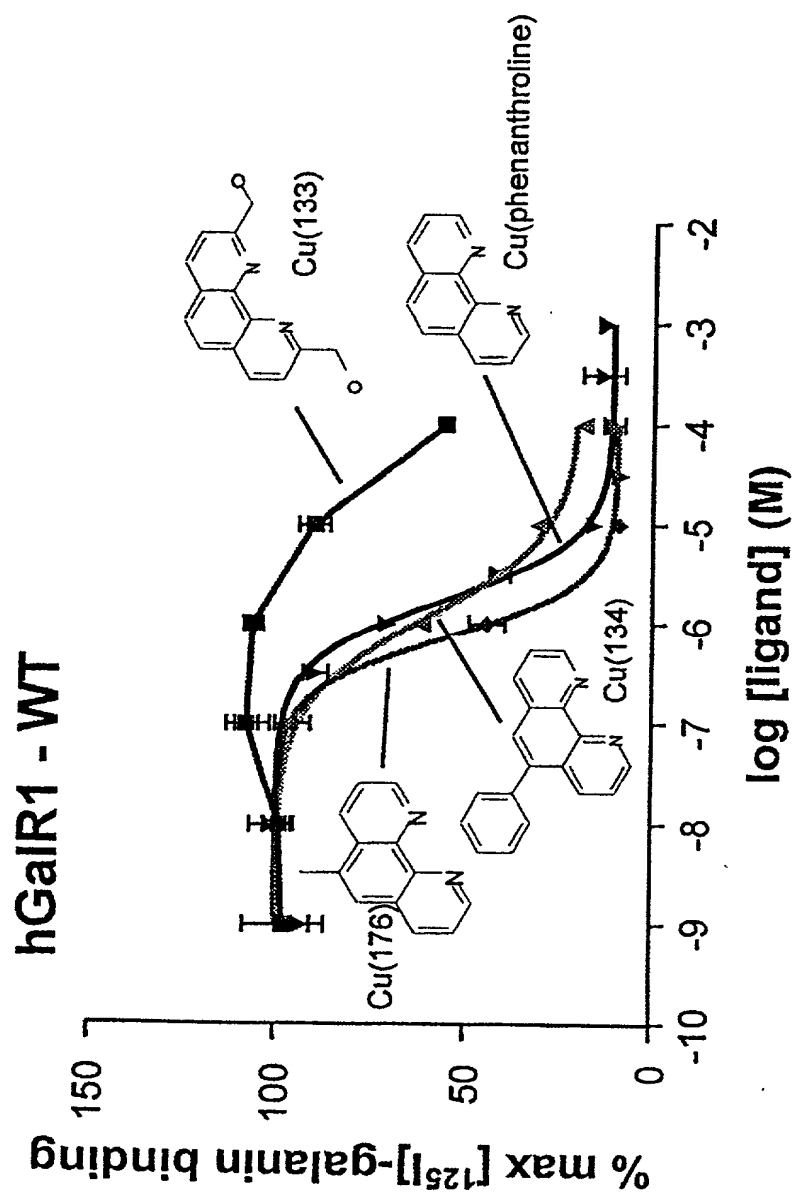


Fig. III.1A

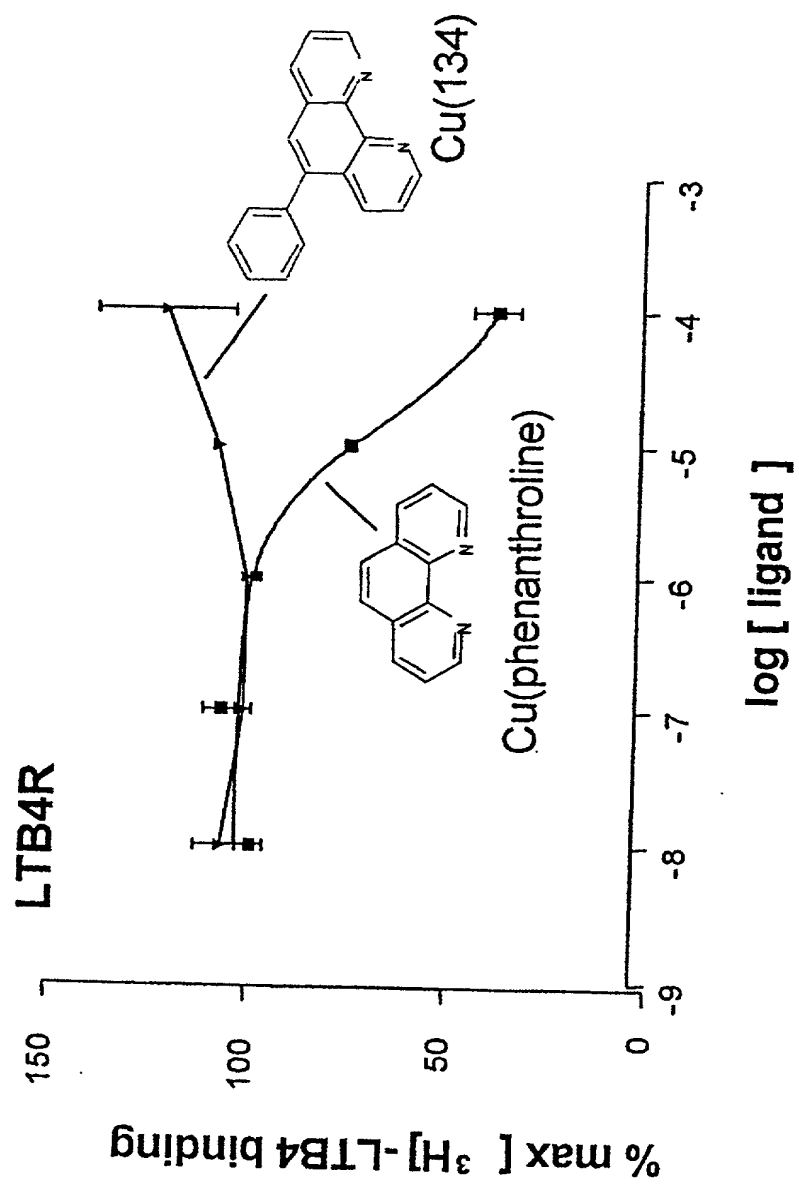


Fig. III.1B

[HisV:05;HisVI:24]-NK1

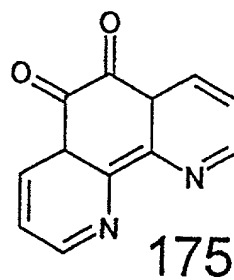
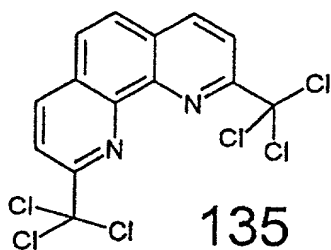
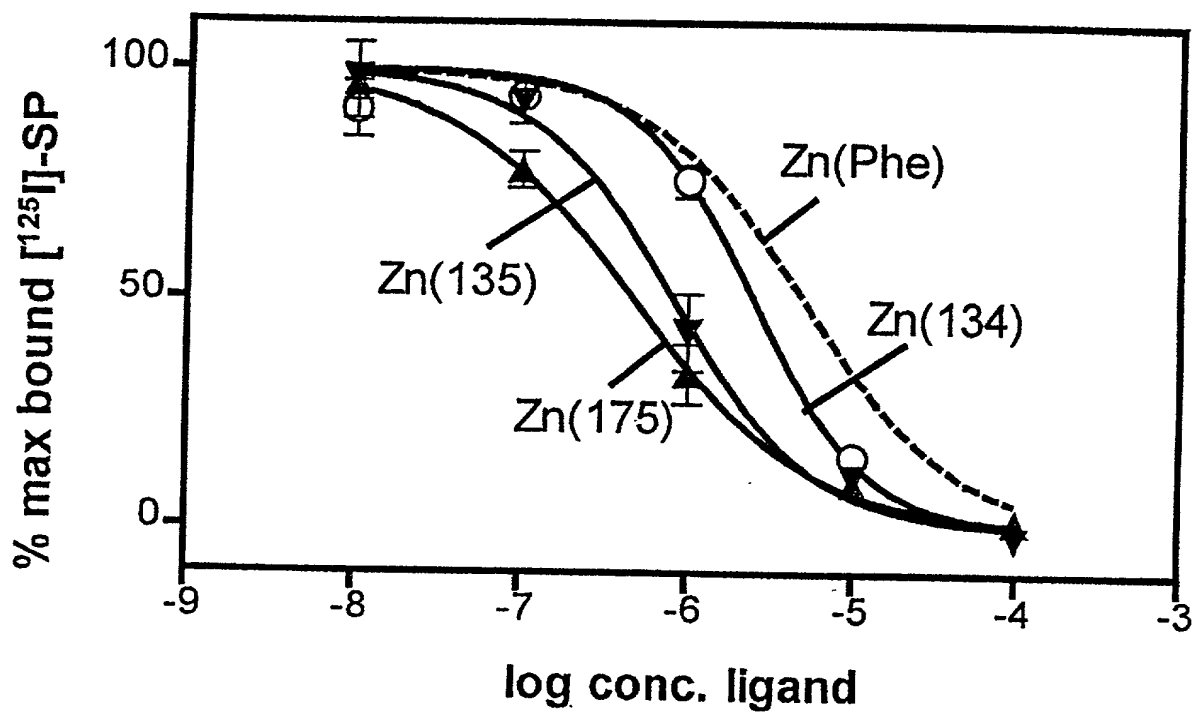


Fig. III.2A

[HisIII:08;CysVII:06]-NK1

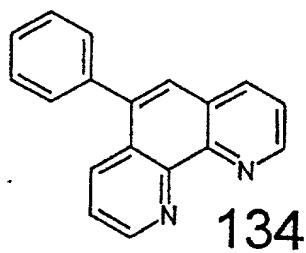
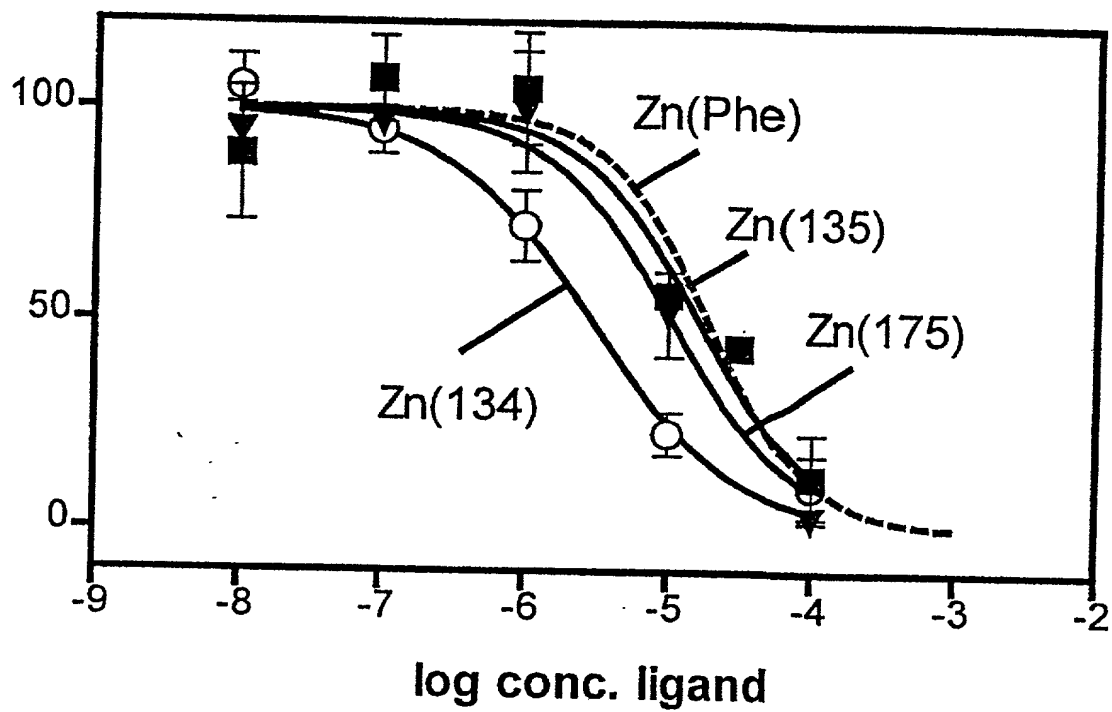


Fig. III.2B

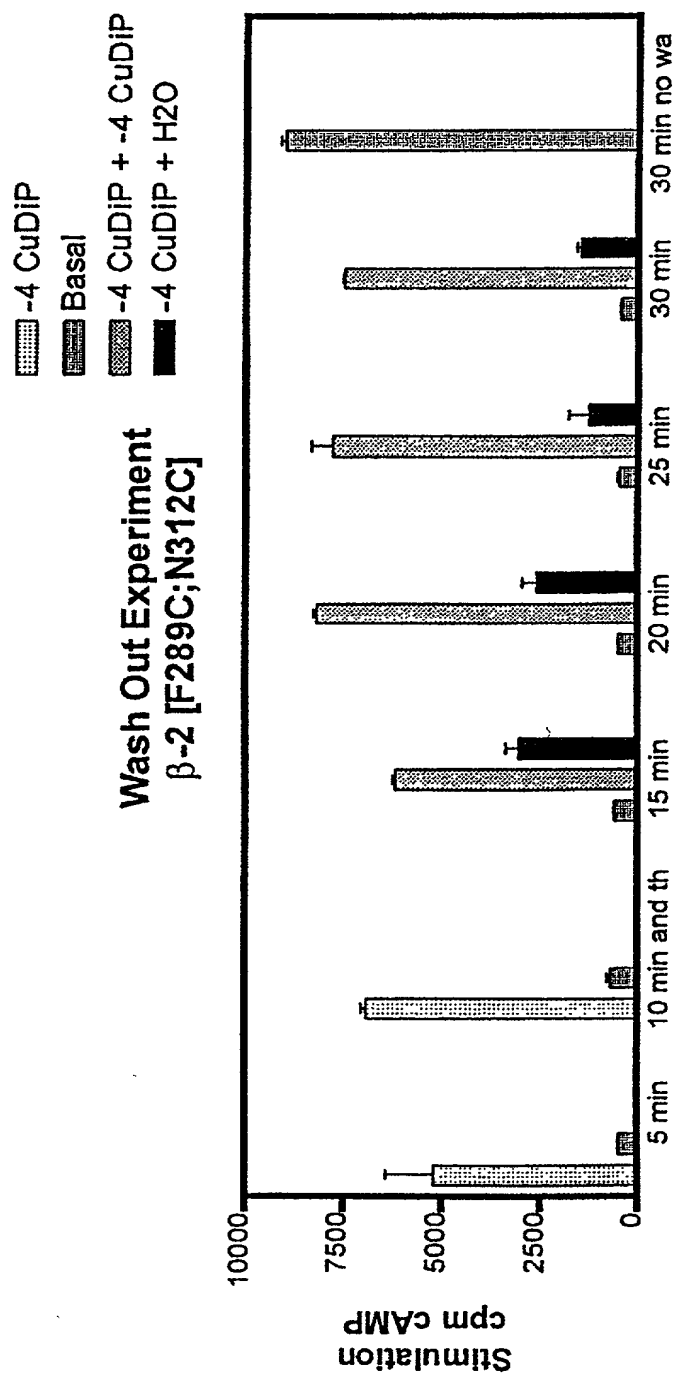


Fig. III.3A

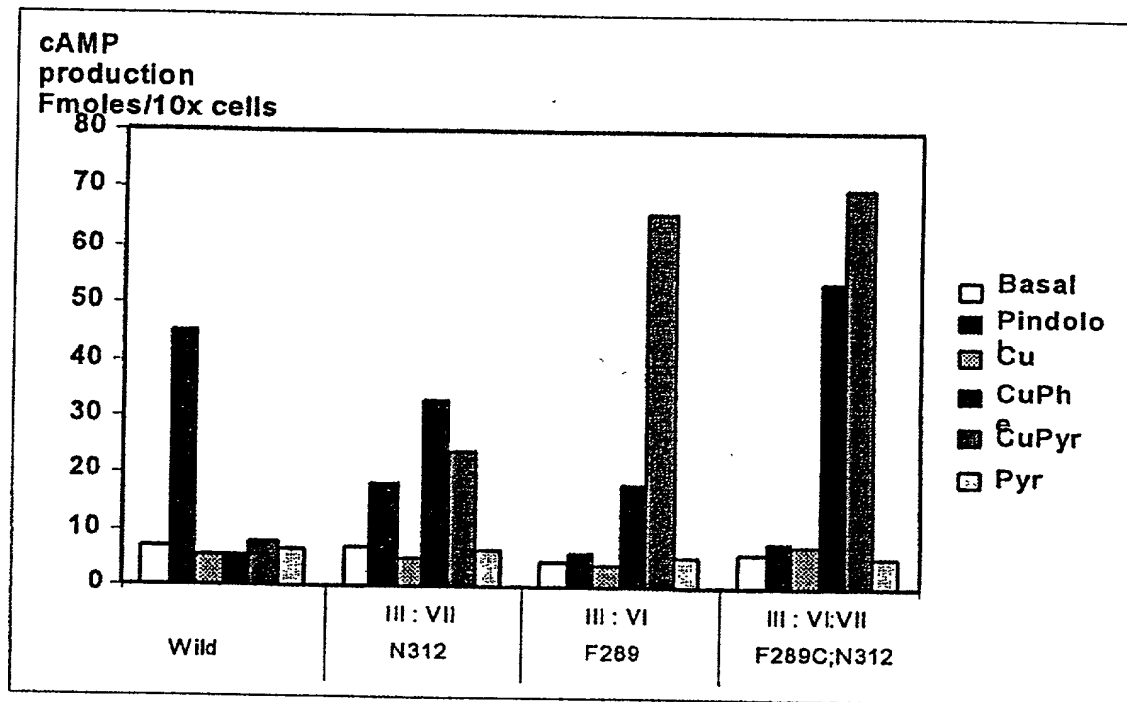


Fig. III.3B

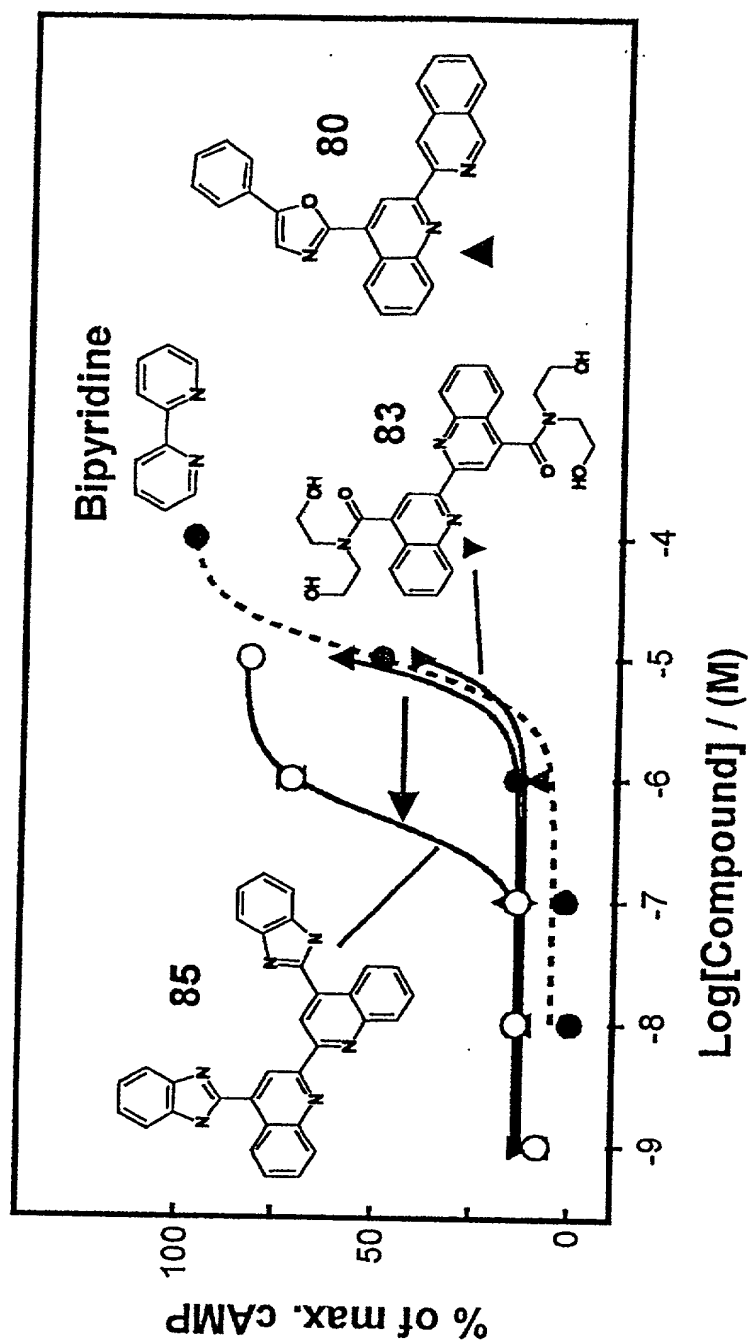


Fig. III.3C

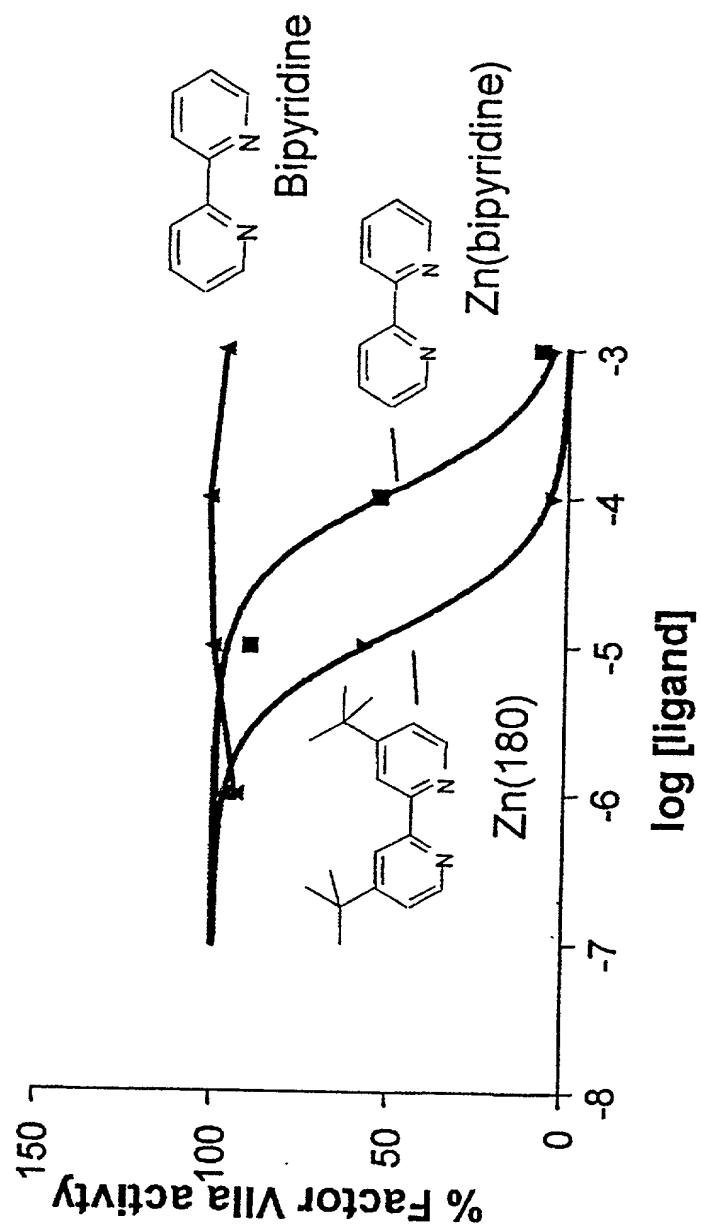


Fig. III.4A

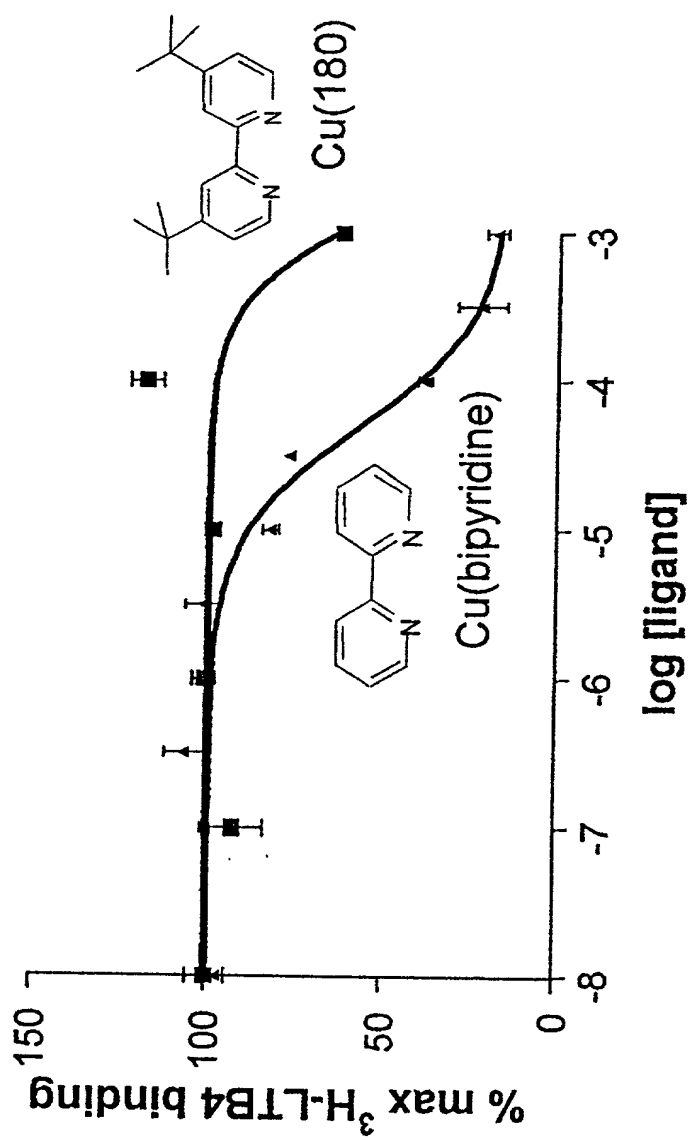


Fig. III.4B

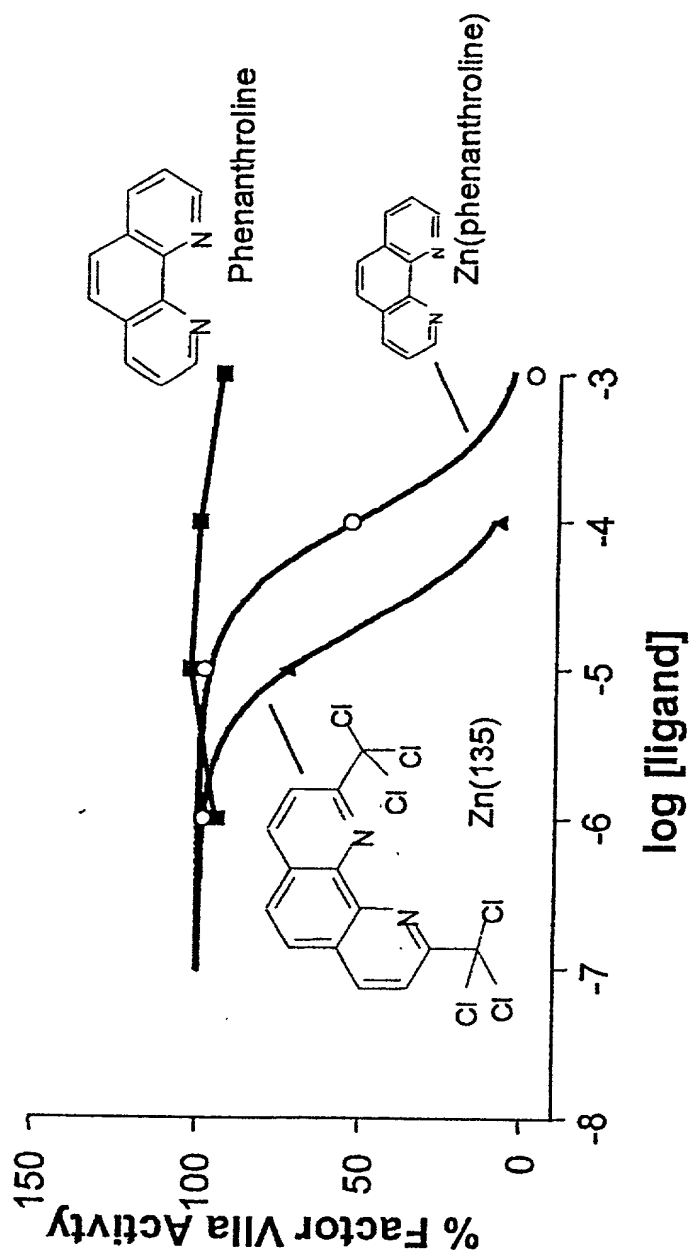


Fig. III.4C

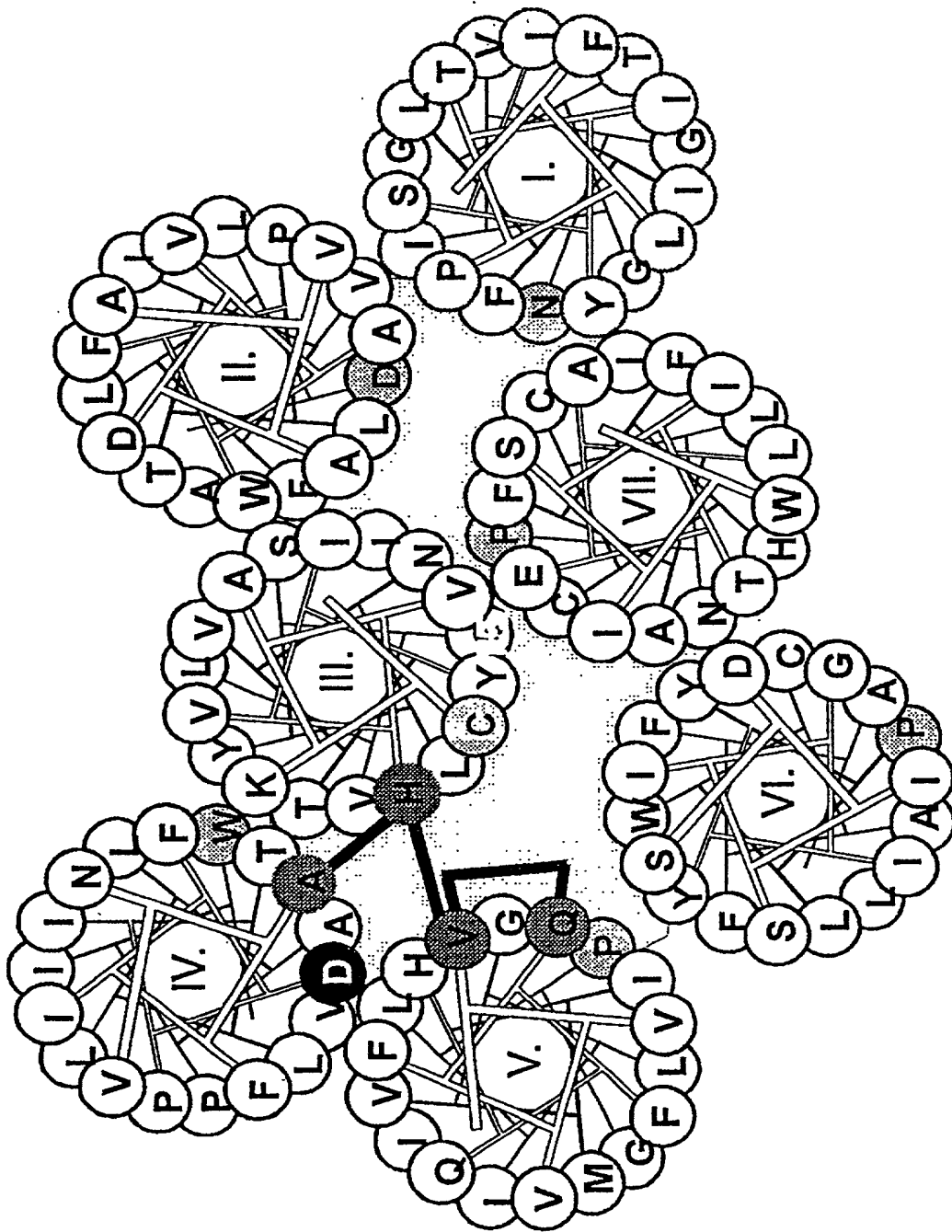
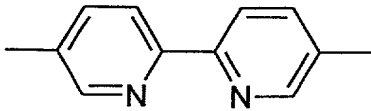
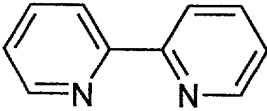
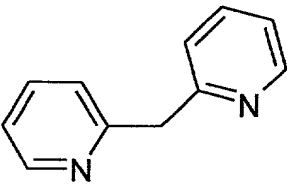
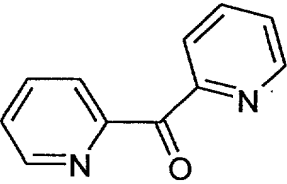
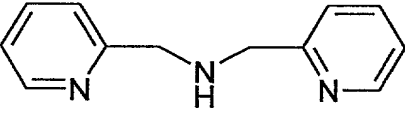
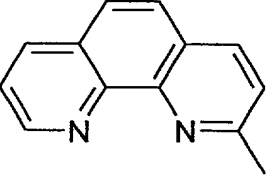
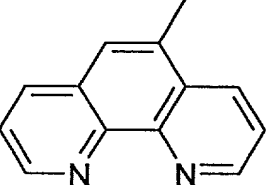
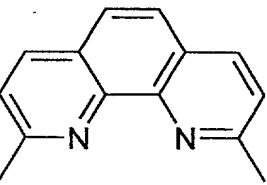
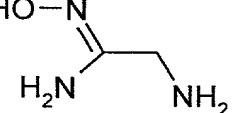


Fig. III.5

	Metal ion	Log K ₁	Log K ₂	Log K ₃
	Co ²⁺	6.4	11.3	16.6
	Co ²⁺ Ni ²⁺ Zn ²⁺ Cu ²⁺	5.8 7.0 5.3 8.1	11.3 13.9 9.6 13.6	16.0 16.6 13.3 17.0
	Zn ²⁺	2.8	5.2	
	Cu ²⁺	5.1		
	Zn ²⁺	7.6	12.1	
	Zn ²⁺ Cu ²⁺	5.0 7.4	9.4 13.8	12.7
	Zn ²⁺ Cu ²⁺	6.6 8.6	12.6 15.0	18.3 20.0
	Zn ²⁺ Cu ²⁺	4.1 5.2	7.7 11.0	19.1
	Zn ²⁺	4.1	7.8	9.5

Figur V

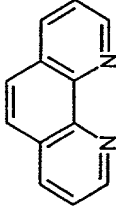
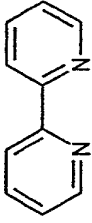
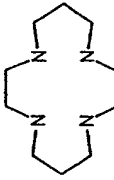
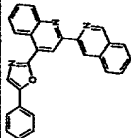
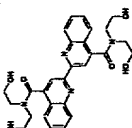
Compound	Structure	Name	Provider
62		1,10-Phenanthroline	Sigma
92		Dipyridine	Sigma
60		Cyclam	Aldrich
80		2-(isoquinoline-3-yl)-4-(5-phenyl-oxazol-2-yl)-quinoline	ChemDiv Inc.
83		2,2'-di(4-(N,N-(2-hydroxyethyl)carboxamide)quinoline)	ChemDiv Inc.

Fig. VI

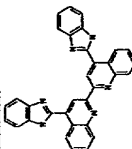
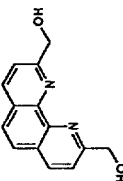
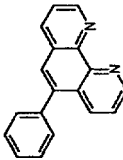
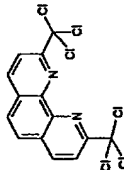
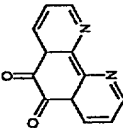
85		2,2'-di(4-(benzimidazol-2-yl)-quinoline)	ChemDiv Inc.
133		2,9-dimethanol-1,10-phenanthroline	Sigma-Aldrich
134		5-phenyl-1,10-phenanthroline	Sigma-Aldrich
135		2,9-bis(trichloromethyl)-1,10-phenanthroline	Sigma-Aldrich
175		1,10-phenanthroline-5,6-dione	Aldrich

Fig. VI

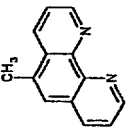
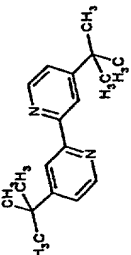
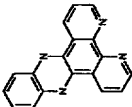
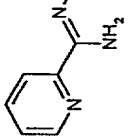
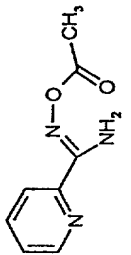
176		5-methyl-1,10-phenanthroline	Sigma
180		4,4'-DI-tert-butyl-2,2'-dipyridyl	Aldrich
183		Dipyrido[3,2-a:2',3'-c]phenazine hemhydrate	ABCR GmbH & Co
209		2-pyridylamidoxime	7TM Pharma
210		2-pyridylamidoxime, O-acetyl	7TM Pharma

Fig. VI